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| **Topic: Reduce, Reuse, Recycle**  **Host curriculum area: Technology**  **and Science** | | **Year level: Year 5 Levels: 2 and 3**  **Learning tools: Thinking Keys, Six Hats, PMI, Bloom’s Taxonomy** | | | | | | |
| **Duration:**  Term 2 2009: 7 weeks | | **Teacher:** | | | | | | |
| **BIG QUESTION: Waste is anything no longer useful or left over**  **AREAS OF INVESTIGATION: People waste, RRR, Composting (ADD MORE LATER)** | | | | | | | | |
| **Key Concepts:**   * There are many ways of handling waste (Reduce, Reuse, Recycle) * All waste must be disposed of in land, water or air * If we are to reduce waste we need to develop an attitude where people think before they buy. * Waste management (recycling centres, kerbside rubbish and recycling collection; refuse stations) * Landfills * Use of natural resources * Waste minimisation * Waste decomposition * Methods of waste management/disposal (reusing, recycling, vermicomposting, composting * Personal and community commitment to undertake action - We are all responsible. One person can make a   difference to the environment. | | | | | | | | |
| **SPECIFIC LEARNING OUTCOMES (Add to these later)**   * Describe the differences between reduce, reuse and recycle * Sort waste using 3 R’s * Identify ways people manage and take responsibility for waste * Use visual language to present a poster or brochure giving a positive environmental message on one of the three R’s. * Ask relevant open questions to the inquiry of Reduce, Reuse and Recycle. | | | | | **FOCUS QUESTIONS/WONDERINGS (Children’s ideas)**  **What is solid waste?**  **Why does the city have a waste problem?**  **What does rethink, reduce, reuse, recycle mean?**  **What can we do to help reduce, reuse, recycle?**  **TO ADD TO…** | | | |
| **ACHIEVEMENT OBJECTIVES**   |  |  |  |  | | --- | --- | --- | --- | | **Curriculum area:**  Social Studies: The Economic World | **Curriculum area:**  Arts: developing practical knowledge- Visual Arts | **Curriculum area:**  Health and Physical Education | **Curriculum area:**  Science- Material World | | **Achievement objectives:**  **Level 3 Understand that people have social, cultural, and economic rights and responsibilities** | **Achievement objectives:**  **Level 3 Exlore some art-making conventions, applying knowledge of elements and selected principles through the use of materials and processes** | **Achievement objectives:**  **Level 3 Identify how health care and physical activity practices are influenced by the community and environmental factors** | **Achievement objectives:**  **Level 3 Material World**  **Properties and changes of matter**  **Group materials in different ways, based on observations and measurements of the characteristic chemical and physical properties of a range of materials** | | **Curriculum area:**  Technology: Technological Practice | **Curriculum area:**  English: Oral, Visual, Written |  |  | | **Achievement objectives:**  **Level 3 Develop a plan that identifies the key stages and the resources required to complete an outcome** | **Achievement objectives:**  **Level 3 Integrate sources of information, processes, and strategies with developing confidence to identify, form and express ideas** |  |  | | | | | | | | | |
| **RESOURCES**  Waste CCC and Education Officer  Tip the Balance on waste! Environment Canterbury  NLS  School library collection  Videos/DVD’s  Books  Computer – TKI, Wicked  Internet  Parents  Market gardeners  Any other resource people required by the children during the inquiry | | | | | **ASSESSMENT FOCUS**  Self assessment  Questioning  Observation  Checklist  Flow chart of Recycling process  Conference  Presentation of poster (Rubric)  Wearable arts | | | |
| **Key Competencies** | | | | | | | | |
| **Thinking**  **ME as a thinker** | **Using language, symbols and texts**  **ME as an ICT user** | | | **Managing Self**  **ME as a learner** | | **Relating to Others**  **ME as a communicator** | | **Participating and Contributing**  **ME as a team member** |
| Critical | **investigating** | | | **self-assessing** | | **articulating ideas** | | working in teams |
| reasoning | identifying information | | | goal setting | | respecting opinions | | listening |
| clarifying | questioning | | | planning | | active listening | | **questioning** |
| analysing | note taking/ recording ideas | | | working independently | | restating ideas | | **sharing ideas and resources** |
| predicting | **listing ideas** | | | self motivation | | questioning | | time management |
| Creative | sorting | | | resourceful | | representing | | justifying |
| suggesting | evaluating | | | working to a timeline | | reporting | | reaching a consensus |
| questioning | generalising | | | making choices | | summarising | | negotiating |
| **exploring options** |  | | |  | |  | | problem solving |
| considering perspectives | ICT for visual thinking | | |  | | ICT for communicating | | accepting criticism |
| Reflective | ICT for creating | | |  | |  | | **giving feedback** |
| predicting |  | | |  | |  | | reporting |
| analysing |  | | |  | |  | |  |
| linking |  | | |  | |  | |  |
| Metacognitive |  | | |  | |  | |  |
| **decision making** |  | | |  | |  | |  |
| selecting strategies |  | | |  | |  | |  |
| **Values** | | | | | | | | |
| Excellence | **Innovation** | | | **inquiry** | | **curiosity** | | diversity |
| equity | community | | | participation | | **ecological sustainability** | | integrity |
| responsibility | respect | | | fairness | | caring | | respect |
|  |  | | |  | |  | |  |
| **Tuning In** Prior Knowledge, engaging, wonderings, what are their theories, coming back during inquiry – do they still fit?   1. What would you put in this bin? Children sort objects into the three bins – recycling, organic and rubbish. Remaining items for reusing. 2. What do we do in our community to reduce, reuse and recycle? 3. What is reduce, reuse and recycle? Class definitions of 3 R’s – affinity diagram 4. KWL 5. Children formulate questions to lead to answering Big Question. Use of Seven Servants 6. Alphabet chart | | | | | | | | |
| Finding out  Activities that will help identify the information needed and decide appropriate strategies for investigation | | | Sorting out  Activities to help identify what has been learnt, how best to organise/record information and make connections | | | | Going further  Strategies/activities that will support students in their quest for further knowledge | |
| **Finding out (Tuning in) – View footage on Youtube on RRR. What do we want to know? Look at big idea and complete post it activity.**  **Test your knowledge: Quiz.**  **Identify the types of rubbish we throw away, sort into categories (other names for rubbish)**  **Wall display of pictures and photos. Word Bank. Books. Create a recording sheet of “Things we recycle at home” and what goes into the 3 different bins. Visit the Brainstorm key. Look at thinking keys and SS ideas. Types of items recycled – flow chart, life cycle. Reduce reuse recycle – triangle.**  **Books, Internet, Community, interviews etc…**  **Sorting out – Visit to Recycling Centre. What can we use recycled items for in our classroom? Composting/worm farm in our classroom. Paper making. Wearable arts. Musical instruments. The recycling of products – Kaiapoi Borough. Waste Activities – CCC. Tip the balance – EC. Create success criteria rubric for poster making.**  **Going further – Uses for recycled products. Add to this as we go…**  **Drawing conclusions:** state understandings **–What do we think and know now?** How do we feel? **High level thinking** about  the topic. Identifying avenues for action and application. Generalising (should be done throughout) | | | | | | | | |
| **Reflection and actions**  **Now what? Taking action**. Reflecting on the unit –what how and why learning has come about? What did I learn about this topic? What did I learn about myself? What should I do now? (Reflect all the way through) | | | | | | | | |
| EVALUATION/NEXT STEPS | | | | | | | | |